

CLAIMS

1. A flat display apparatus having a display unit and driving circuits formed integrally on a substrate, said display unit having pixels laid out in a matrix, said driving circuits driving the pixels of said display unit, said flat display apparatus comprising:

a first gradation setting circuit which, as part of said driving circuits, is disposed along one side of said display unit and which sets gradations of the pixels for a green color; and

a second gradation setting circuit which, as part of said driving circuits, is disposed along another side of said display unit and which sets gradations of the pixels for red and blue colors, said another side being positioned opposite to said one side.

2. The flat display apparatus according to claim 1, wherein the number of gradations set by said first gradation setting circuit is greater than the number of gradations set by said second gradation setting circuit.

3. The flat display apparatus according to claim 1, wherein said first gradation setting circuit sets the gradations of said pixels for said green color by selecting first reference voltages generated by a first

reference voltage generation circuit disposed close to said first gradation setting circuit on said substrate; and

wherein said second gradation setting circuit sets the gradations of said pixels for said red and blue colors by selecting second reference voltages generated by a second reference voltage generation circuit disposed close to second gradation setting circuit on said substrate.

4. The flat display apparatus according to claim 1, wherein said first and said second gradation setting circuits each include a plurality of series circuits corresponding to said gradations, each of said series circuits being formed by switching circuits turned on and off depending on logical values of bits making up gradation data for designating said gradations, said first and said second gradation setting circuits setting the gradations for said pixels by causing said series circuits to select reference voltages corresponding to said gradations on the basis of said gradation data;

wherein, in said first gradation setting circuit, pairs of series circuits each disposed along said one side constitute units arranged perpendicular to said one side in such a manner as to form blocks which correspond

each to one of said pixels and which are positioned along said one side; and

wherein, in said second gradation setting circuit, said series circuits are disposed perpendicular to said one side in such a manner as to form blocks which correspond each to one of said pixels and which are arranged along said one side.

5. A portable terminal apparatus using a flat display apparatus having a display unit and driving circuits formed integrally on a substrate, said display unit having pixels laid out in a matrix, said driving circuits driving the pixels of said display unit, said flat display apparatus comprising:

a first gradation setting circuit which, as part of said driving circuits, is disposed along one side of said display unit and which sets gradations of the pixels for a green color; and

a second gradation setting circuit which, as part of said driving circuits, is disposed along another side of said display unit and which sets gradations of the pixels for red and blue colors, said another side being positioned opposite to said one side.